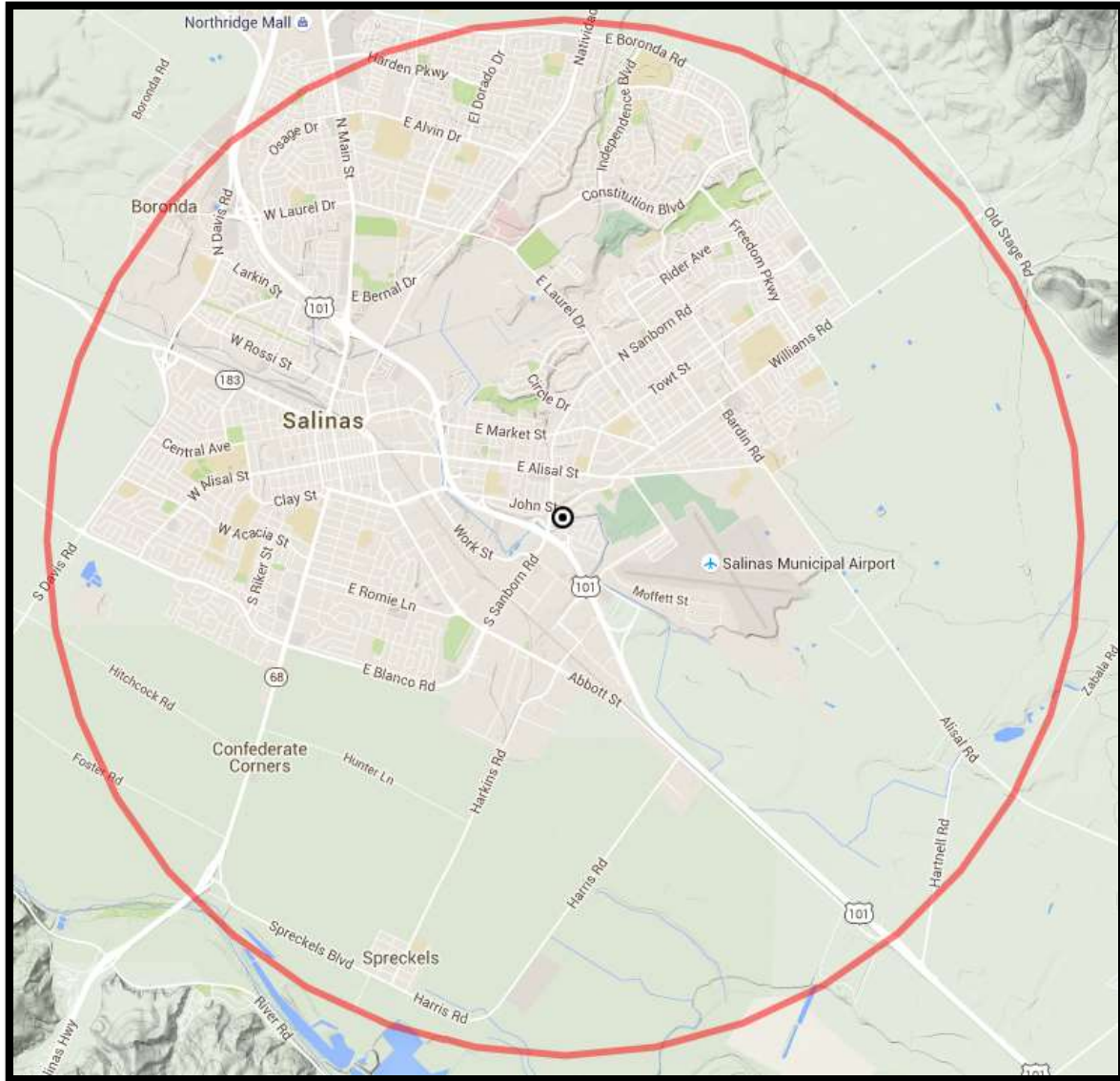




REC Broadcast Services, LLC
11541 Riverton Wharf Rd.
Mardela Springs, MD 21837
844.REC.LPFM/202.621.2355
recnet.com

CP Modify for KIPW-LP
SALINAS, CA
IGLESIA PENTECOSTAL NUEVA VIDA
BNPL-20131029ACA

PROPOSED 60dBu F(50,50) SERVICE CONTOUR



SALINAS, CA – Channel 276L1 (103.1 MHz) ~ ERP 0.100 kW

Elev: 21 meters ~ RCAGL: 16 meters ~ RCAMSL: 37 meters ~ HAAT: -122 meters

Overall structure height: 18 meters – ASR: Not required-existing structure

NAD83 Latitude: 36° 39' 58.6" NL – Longitude: 121° 37' 33.6" WL

NAD27 Latitude: 36° 39' 58.7" NL – Longitude: 121° 37' 29.8" WL

No AM stations within 3 km (nearest stations: KTGE & KYAA 7,528 meters away)

R E C NETWORKS
CHANNEL REPORT

NAD27 LATITUDE: 36 - 39' 58.6" - LONGITUDE: 121 - 37' 29.8"
CHANNEL: 276 - CLASS: LPFM(LP-100)

CHAN	FREQ	CALL	LOCATION	CLS	DIST	REQ	CLEAR	BEAR
273	102.5	KSNI-FM : EDB VV LICENSE LLC	SANTA MARIA	CA B	231.2	0.0	231.2	151.2
273	102.5	KSFM : CBS RADIO OF SACRAMENTO, INC.	WOODLAND	CA B	213.6	0.0	213.6	357.6
273	102.5	KDON-FM : CC LICENSES, LLC * Does not meet third adjacent channel spacing under LCRA Sect 7.	SALINAS	CA B	14.9	0.0	14.9	47.7
275	102.9	KHMQ : HISPANIC TARGET MEDIA INC.	KING CITY	CA	66.0	0.0	66.0	137.5
275	102.9	KBLX-FM : ENTERCOM LICENSE, LLC	BERKELEY	CA B	134.4	97.0	37.4	327.9
275	102.9	KHMQ : HISPANIC TARGET MEDIA INC.	KING CITY	CA A	68.6	56.0	12.6	138.1
275	102.9	KHMQ : HISPANIC TARGET MEDIA INC.	KING CITY	CA A	65.1	56.0	9.1	132.1
275	102.9	KBLX-FM : ENTERCOM LICENSE, LLC	BERKELEY	CA B	134.4	97.0	37.4	327.9
276	103.1	K276BR : RICHARD S. BUSHELL	SANTA CRUZ	CA D5	55.3	32.0	23.3	314.0
276	103.1	KLUN : LAZER LICENSES, LLC	PASO ROBLES	CA A	138.5	67.0	71.5	144.7
276	103.1	KAAT : CASA MEDIA PARTNERS, LLC	OAKHURST	CA B1	197.6	87.0	110.6	63.1
276	103.1	KIPW-LP : IGLESIA PENTECOSTAL NUEVA VIDA : Currently authorized facility	SALINAS	CA L1	1.1	24.0	-22.9	251.9
277	103.3	KATM : RADIO LICENSE HOLDING CBC, LLC	MODESTO	CA B	103.7	97.0	6.7	13.3
277	103.3	K277AH : WOLFHOUSE RADIO GROUP, INC.	WATSONVILLE	CA D2	26.1	15.0	11.1	334.6
277	103.3	KSCU : SANTA CLARA UNIVERSITY	SANTA CLARA	CA D	80.6	13.0	67.6	339.8
277	103.3	K277BN : COYOTE COMMUNICATIONS, INC.	SAN MARTIN	CA D5	55.8	21.0	34.8	4.7
278	103.5	KRAY-FM : WOLFHOUSE RADIO GROUP, INC.	SALINAS	CA A	9.0	29.0	-20.0	86.0
279	103.7	KOSF : AMFM BROADCASTING LICENSES, LLC	SAN FRANCISCO	CA B	134.3	0.0	134.3	327.9
279	103.7	KFBT : CAPSTAR TX LLC	HANFORD	CA B	168.0	0.0	168.0	93.7

LPFM SECOND ADJACENT CHANNEL WAIVER STUDY

KIPW-LP
Salinas, CA
Channel 276L1 (103.1 MHz)

The proposed location is second adjacent channel short-spaced to KRAY-FM, Salinas, California. Based on a study performed by Michelle Bradley of REC Networks, it has been determined that this proposed site qualifies for a second adjacent waiver as specified in Section 73.807(e) of the Commission's Rules.

KRAY-FM operates on Channel 278A with 2.5 kW effective radiated power ("ERP") at 156 meters height above average terrain ("HAAT") into a non-directional antenna with an effective HAAT of 375 meters towards the proposed LPFM site and is located 9.0 km from the proposed LPFM site. WRDU places an 87.4 dBu service contour at the proposed LPFM site.

Using the U/D method¹, the proposed LPFM station is predicted to produce an undesired interference overlap in respect to KRAY-FM to the proposed LPFM station's 127.4 dBu interference contour ("overlap zone"). At 100 watts ERP, the overlap zone extends to 30 meters from the radiation center. As the radiation center is 16 meters above ground level, the interference will reach the ground. Following the formula $\sqrt{\text{overlap}^2 - \text{height}^2}$, the sphere of the interference contour reaches the ground and extends 25.7 meters from the base of the tower. Within 25.7 meters of the base of the antenna structure, there is a two story occupied building.

KIPW-LP proposes to use a Nicom BKG-77 2-bay circularly polarized antenna at half-wave spacing. The antenna will be mounted on the side of an existing sign structure on the property adjacent to the building. Based on the manufacturer's specifications for this antenna, the downward radiation field strength at 7 meters above ground level is 125.34 dBu at the 25 degree depression angle. The interference does not reach to any point higher than 9 meters above ground level. There are no other structures or major highways within the 25.7 meter overlap zone.

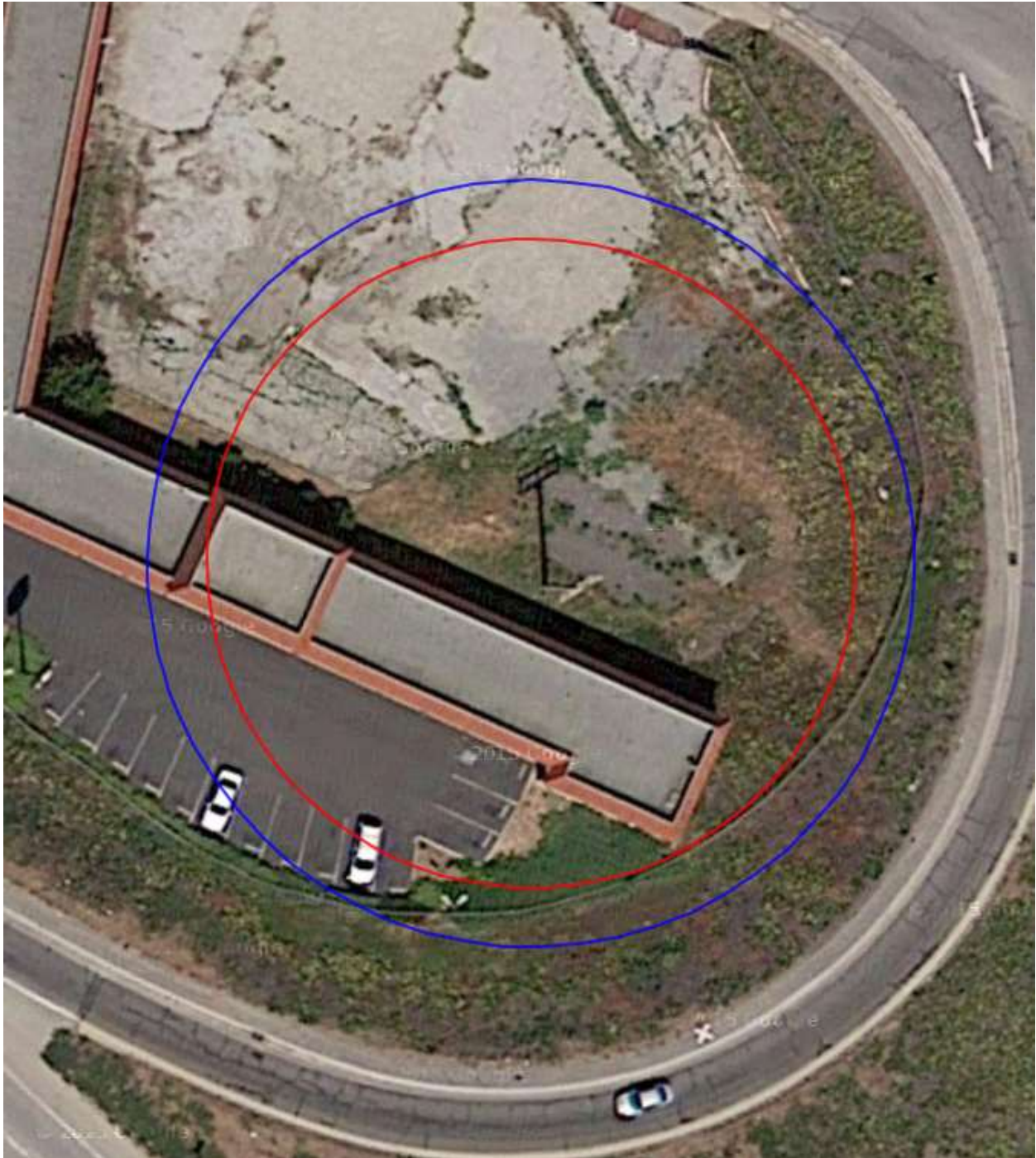
Based on the information presented, REC submits that the proposed station will not create any interference to existing or potential listeners of second adjacent channel station KRAY-FM.

The applicant requests a waiver of §73.807 of the Commission's Rules in respect to KRAY-FM.

Report completed by
Michelle Bradley
Founder, REC Networks
August 20, 2015

¹ - See *Living Way Ministries, Inc.* Memorandum Opinion and Order, 17 FCC Rcd 17054, 17056 (2002) at 5. *Recon denied* 23 FCC Rcd 15070 (2008).

AREA SURROUNDING ANTENNA STRUCTURE



The **BLUE CURVE** is the 30 meter radius of the interference contour at the center of radiation. The **RED CURVE** is the 25.7 meter radius of the interference contour as it reaches ground level. The structure is a two-story occupied hotel. Due to the horizontal pattern of the proposed antenna, interference to KRAY-FM will be above the occupied structure and will not penetrate the structure itself.

REC 3-D VIEW

Showing the radiation pattern of the proposed antenna to demonstrate that the interference will not penetrate the building.



Proposed Power:				0.1 kW				
Antenna Height AGL:				18 m				
Interference Contour:				127.4 dBu				
Artificial RX Antenna Height:				7 m				
Antenna Type:				Nicom BKG77 - 2 bay Half-wave spacing				
Angle Below Horizon	Antenna Relative Field	ERP in kW	ERP in dBk	Distance from Ant to Interference Contour	Distance from Ant to Artificial Plane	Field Strength in dBu @ Artificial Plane	Distance from Ant to Ground Level	Field Strength in dBu @ Ground Level
5	0.988	0.098	-10.10	29.56	126.21	114.79	206.53	110.52
10	0.952	0.091	-10.43	28.49	63.35	120.46	103.66	116.18
15	0.889	0.079	-11.02	26.60	42.50	123.33	69.55	119.05
20	0.791	0.063	-12.04	23.67	32.16	124.74	52.63	120.46
25	0.686	0.047	-13.27	20.53	26.03	125.34	42.59	121.06
30	0.577	0.033	-14.78	17.27	22.00	125.30	36.00	121.02
35	0.463	0.021	-16.69	13.85	19.18	124.58	31.38	120.30
40	0.354	0.013	-19.02	10.59	17.11	123.23	28.00	118.96
45	0.256	0.007	-21.84	7.66	15.56	121.25	25.46	116.97
50	0.174	0.003	-25.19	5.21	14.36	118.59	23.50	114.31
55	0.110	0.001	-29.17	3.29	13.43	115.19	21.97	110.91
60	0.061	0.000	-34.29	1.83	12.70	110.55	20.78	106.27
65	0.028	0.000	-41.06	0.84	12.14	104.18	19.86	99.90
70	0.006	0.000	-54.44	0.18	11.71	91.11	19.16	86.84
75	0.004	0.000	-57.96	0.12	11.39	87.83	18.63	83.55
80	0.008	0.000	-51.94	0.24	11.17	94.02	18.28	89.74
85	0.008	0.000	-51.94	0.24	11.04	94.12	18.07	89.84
90	0.009	0.000	-50.92	0.27	11.00	95.18	18.00	90.90

PROPOSED ANTENNA MOUNTING LOCATION



DETERMINATION Results

Structure does not require registration. The structure meets the 6.10-meter (20-foot) Rule criteria.

Your Specifications

NAD83 Coordinates

Latitude	36-39-58.6 north
Longitude	121-37-33.6 west

Measurements (Meters)

Overall Structure Height (AGL)	18
Support Structure Height (AGL)	18
Site Elevation (AMSL)	21

Structure Type

SIGN - Any Type of Sign or Billboard